

## WHAT IS CLAIMED IS:

1. An optical disk of recording type on which data  
is recordable, including:

a data recording and reproducing area for recording

5 data therein and reproducing data therefrom; and

a read-only disk identification information area for  
recording disk identification information for identifying said  
optical disk therein.

2. The optical disk as claimed in claim 1,

10 wherein said disk identification information is  
formed by removing a reflection film formed on the optical disk  
in a strip shape.

3. The optical disk as claimed in claim 1,

15 wherein said disk identification information  
includes an inherent disk identifier for each optical disk.

4. The optical disk as claimed in claim 1,

wherein said data recording and reproducing area  
includes an area for recording therein encrypted data, which  
is encrypted using information including said disk  
20 identification information for identifying said optical disk  
as a key.

5. The optical disk as claimed in claim 4,

wherein said encrypted data includes content data  
which is at least one of image data and music data.

25 6. The optical disk as claimed in claim 4,

wherein said encrypted data includes a descramble key for decrypting a cipher which has been performed on content data.

7. The optical disk as claimed in claim 4,  
5 wherein said encrypted data includes:  
(a) a descramble key for decrypting a cipher which has been performed on content data, and  
(b) an error detection code for detecting an error in the descramble key.

10 8. An optical disk of recording type on which data is recordable,

wherein said optical disk includes a data recording and reproducing area for recording data therein and reproducing data therefrom, and

15 wherein said data recording and reproducing area includes an area for recording therein, content data which is at least one of encrypted image data and encrypted music data, and a descramble key for decrypting a cipher which has been performed on the content data.

20 9. The optical disk as claimed in claim 8,  
wherein said content data and said descramble key are recorded in the same sector.

10. The optical disk as claimed in claim 8,  
wherein said content data and said descramble key  
25 are respectively recorded in sectors different from each other.

11. The optical disk as claimed in claim 10,  
wherein a pointer for pointing an area for recording  
the descramble key therein is recorded in the sector in which  
the content data is recorded.

5           12. An optical disk of recording type on which data  
is recordable, including:

a read-only disk identification information area for  
recording therein disk identification information for  
identifying said optical disk;

10           a data recording and reproducing area for recording  
therein and reproducing therefrom, content data including at  
least one of encrypted image data and encrypted music data; and

15           a key management information area for recording  
therein, key information used when reproducing the content data,  
and a descramble key which is encrypted using the disk  
identification information as a key.

13. An optical disk recording and reproducing  
apparatus for controlling at least one of:

20           (a) a recording operation for recording data in a  
data recording and reproducing area of an optical disk of  
recording type on which data is recordable, and

(b) a reproducing operation for reproducing data from  
the data recording and reproducing area,

25           wherein said optical disk includes a disk  
identification information area for recording therein disk

identification information for identifying said optical disk,  
and

wherein said optical disk recording and reproducing  
apparatus comprises;

5           reproducing means for reproducing said disk  
identification information from said disk identification  
information area; and

control means for judging whether or not at least  
one of the recording operation and the reproducing operation  
10       is performed based on the reproduced disk identification  
information, and for controlling said optical disk recording  
and reproducing apparatus to perform at least one of the  
recording operation and the reproducing operation in response  
to a judgment result.

15       14. An optical disk recording apparatus for  
recording content data on an optical disk of recording type on  
which data is recordable,

wherein said optical disk includes an area for  
recording a disk identification information area for  
20       identifying said optical disk, and

wherein said optical disk recording apparatus  
comprises:

reproducing means for reproducing the disk  
identification information from the disk identification  
25       information area, and

recording means for recording at least partially encrypted data on the optical disk, using the reproduced disk identification information as a key.

15. The optical disk recording apparatus as claimed  
5 in claim 14,

wherein said encrypted data includes a descramble key for decrypting a cipher which has been performed on the content data.

16. The optical disk recording apparatus as claimed  
10 in claim 14,

wherein said encrypted data includes a descramble key for decrypting a cipher which has been performed on the content data, and an error detection code for detecting an error in the descramble key.

15 17. An optical disk reproducing apparatus for  
reproducing content data from an optical disk of recording type  
on which data is recordable,

wherein said optical disk includes a disk  
identification information area for recording therein disk  
20 identification information for identifying said optical disk,  
and

wherein said optical disk reproducing apparatus  
comprises:

reproducing means for reproducing said disk  
25 identification information from said disk identification

information area, and

decrypting means for decrypting at least partially encrypted data using the reproduced disk identification information as a key after reproducing said at least partially encrypted data from said optical disk.

18. The optical disk reproducing apparatus as claimed in claim 17,

wherein the data to be decrypted includes a descramble key for decrypting a cipher which has been performed on the content data.

19. The optical disk reproducing apparatus as claimed in claim 17,

wherein the data to be decrypted includes a descramble key for decrypting a cipher which has been performed on the content data, and an error detection code for detecting an error in the descramble key, and

wherein said decrypting means detects an error included in said descramble key based on said error detection code.

20. An optical disk recording apparatus for recording content data on an optical disk of recording type on which data is recordable, comprising:

recording means for recording on said optical disk, encrypted content data and a descramble key for decrypting a cipher which has been performed on the content data.

21. The optical disk recording apparatus as claimed in claim 20,

wherein said recording means records the encrypted content data in a predetermined first sector, and records the 5 scramble key in a second sector different from the first sector.

22. The optical disk recording apparatus as claimed in claim 21,

wherein said recording means records a pointer for 10 pointing an area of the second sector in which the scramble key is recorded, in the first sector in which the encrypted content data is recorded.

23. An optical disk reproducing apparatus for reproducing content data from an optical disk of recording type 15 on which data is recordable, comprising:

reproducing means for reproducing encrypted content data and a scramble key for decrypting a cipher which has been performed on the content data, from the optical disk.

24. The optical disk as claimed in claim 23,

20 wherein said reproducing means reproduces the encrypted content data from a first sector of the optical disk, and reproduces the scramble key from a second sector of the optical disk different from the first sector.

25. The optical disk as claimed in claim 24,  
25 wherein said reproducing means reproduces a pointer

for pointing an area of the second sector from which the descramble key is reproduced, from the first sector in which the encrypted content data is recorded.

26. An optical disk recording apparatus for  
5 allocating and recording information about a descramble key required for encrypting data content, into a key management information area of an optical disk of recording type on which data is recordable, comprising:

acquiring means for acquiring information about the  
10 descramble key required for content data to be recorded; and  
allocating means for reproducing the information  
about the descramble key which is recorded in the key management information area, and for allocating an area for recording a descramble key to be recorded, within the key management  
15 information area, based on the reproduced descramble key and the acquired information about the descramble key.

27. An optical disk recording apparatus for  
recording information about a descramble key required for  
encrypting content data in a key management information area  
20 of an optical disk of recording type on which data is recordable,  
comprising:

acquiring means for acquiring a descramble key  
required for reproducing content data; and  
recording means for reproducing information about  
25 the descramble key which is recorded in the key management

information area, and recording the acquired descramble key so as to allocate the same acquired descramble key within the key management information area, based on the reproduced information about the descramble key.

5           28. An optical disk recording apparatus for recording content data on an optical disk of recording type on which data is recordable,

              wherein said optical disk includes a disk identification information area for recording therein disk 10 identification information for identifying the optical disk; and

              wherein said optical disk recording apparatus comprises:

              reproducing means for reproducing the disk 15 identification information for identifying said optical disk from the disk identification information area;

              judging means for judging whether or not content data can be recorded on the optical disk based on the reproduced disk 20 identification information;

              allocating means for allocating an area for recording a descramble key required for encrypting the content data, within the key management information area of said optical disk when judging that the content data can be recorded on the optical disk; and

25           recording means for recording a key index for

indicating an area for recording a descramble key of content data to be recorded, in the same sector as the sector in which the content data to be recorded is recorded.

29. An optical disk reproducing apparatus for  
5 reproducing a descramble key from a key management information area of an optical disk of recording type on which data is recordable,

wherein said optical disk includes a disk identification information area for recording therein disk  
10 identification information for identifying said optical disk,  
wherein said optical disk reproducing apparatus comprises:

first reproducing means for reproducing data from  
said key management information area;

15 judging means, based on the reproduced data in a sector area within the key management information area, for judging whether or not the data in said sector area is scrambled;

second reproducing means for reproducing a key index which is recorded in the same sector area as the sector area  
20 in which the data in the sector area is recorded when judging that the data in the sector area is scrambled, and reproducing a descramble key from a descramble key area indicated by the reproduced key index;

third reproducing means for reproducing the disk  
25 identification information from the disk identification

information area; and

decrypting means for reproducing the descramble key by decrypting the reproduced and encrypted descramble key using the reproduced disk identification information as a key.

5 30. The optical disk as claimed in claim 29,

wherein an error detection code is given to the decrypted descramble key, and

wherein said decrypting means judges whether or not there is an error in the decrypted descramble key, based on the  
10 error detection code which is given to the decrypted descramble key, and judges whether or not the decrypted descramble key should be reproduced based on a judgement result.

31. An optical disk recording and reproducing method for controlling at least one of:

15 (a) a recording operation for recording data into a data recording and reproducing area of an optical disk of recording type on which data is recordable, and

(b) a reproducing operation for reproducing the data from the data recording and reproducing area,

20 wherein said optical disk includes a disk

identification information area for recording therein disk identification information for identifying said optical disk, and

wherein said method includes the steps of:

25 reproducing the disk identification information

from the disk identification information area; and  
judging whether or not at least one of the recording  
operation and the reproducing operation is performed based on  
the reproduced disk identification information, and  
5 controlling the recording operation and the reproducing  
operation to perform at least one of the recording operation  
and the reproducing operation based on a judgement result.

32. An optical disk recording method for recording  
content data on an optical disk of recording type on which data  
10 is recordable,

wherein said optical disk includes a disk  
identification information area for recording therein disk  
identification information for identifying said optical disk,  
and

15 wherein said method includes the steps of:  
reproducing disk identification information from  
the disk identification information area; and  
recording at least partially encrypted data on the  
optical disk, using the reproduced disk identification  
20 information as a key.

33. An optical disk reproducing method for  
reproducing content data from an optical disk of recording type  
on which data is recordable,

wherein said optical disk includes a disk  
25 identification information area for recording therein disk

identification information for identifying said optical disk,  
and

wherein said method includes of the steps of:  
reproducing the disk identification information

- 5 from the disk identification information area; and  
decypting at least partially encrypted data using  
the reproduced disk identification information as a key; after  
reproducing said at least partially encrypted data.

34. An optical disk recording method for recording  
10 content data on an optical disk of recording type on which data  
is recordable, including the steps of:

recording encrypted content data and a descramble  
key for decrypting a cipher which has been performed on the  
content data, on said optical disk.

- 15 35. An optical disk reproducing method for  
reproducing content data from an optical disk of recording type  
on which data is recordable, including the steps of:

reproducing encrypted content data and a descramble  
key for decrypting a cipher which has been performed on the  
20 content data, from said optical disk.

36. An optical disk recording method for allocating  
and recording information about a descramble key required for  
encrypting content data into a key management information area  
of an optical disk of recording type on which data is recordable,  
25 including the steps of:

acquiring information about a descramble key required for content data to be recorded; and

reproducing information about the descramble key which is recorded in the key management information area, and  
5 allocating an area for recording therein the descramble key to be recorded, within the key management information area, based on the reproduced information about the descramble key and the acquired information about the descramble key.

37. An optical disk recording method for recording  
10 information about a descramble key required for encrypting content data in a key management information area of an optical disk of recording type on which data is recordable, including the steps of:

acquiring a descramble key required for reproducing  
15 content data; and

reproducing information about the descramble key which is recorded in the key management information area, and recording the acquired descramble key so as to allocate the acquired descramble key within the key management information  
20 area, based on the reproduced information about the descramble key.

38. An optical disk recording method for recording content data on an optical disk of recording type on which data is recordable,

25 wherein said optical disk includes a disk

identification information area for recording therein disk identification information for identifying said optical disk, and

wherein said method includes the steps of:

5 reproducing the disk identification information from the disk identification information area;

judging whether or not content data can be recorded on the optical disk based on the reproduced disk identification information;

10 allocating an area for recording a descramble key required for encrypting the content data, into the key management information area within the optical disk, when judging that the content data can be recorded on the optical disk; and

15 recording a key index for indicating an area for recording the descramble key of content data to be recorded is recorded in the same sector in which the content data to be recorded is recorded.

39. An optical disk reproducing method for  
20 reproducing a descramble key from a key management information area of an optical disk of recording type on which data is recordable,

wherein the optical disk includes a disk identification information area for recording disk

25 identification information for identifying the optical disk,

and

wherein said method includes the steps of:  
reproducing data from the key management information  
area;

5           based on data in a sector area within the reproduced  
key management information area, judging whether or not the data  
in the sector area is scrambled;

10          reproducing a key index which is recorded in the same  
sector area as the sector area in which the data in the sector  
area is recorded, when judging that the data in the sector area  
is scrambled, and reproducing a descramble key from a descramble  
key area indicated by the reproduced key index;

15          reproducing the disk identification information  
from the disk identification information area; and

20          reproducing the descramble key by decrypting the  
reproduced and encrypted descramble key using the reproduced  
disk identification information as a key.

40. ~~An optical disk of recording type on which data  
is recordable, including:~~

20          ~~a first information area for recording first disk  
information therein;~~

25          ~~a second information area for recording therein  
second disk information for identifying each optical disk; and~~

25          ~~a user data area for recording information data by  
irradiating a light beam onto said user data area.~~

41. The optical disk as claimed in claim 40,  
wherein the second disk information is recorded by  
partially removing a recording film within the second  
information area, in an elongated shape in a radial direction  
5 and at a plurality of areas.
42. The optical disk as claimed in claim 40,  
wherein the second information area is arranged  
within the first information area.
43. The optical disk as claimed in claim 40,  
10 wherein the second information area is arranged on  
an inner peripheral side of the first information area.
44. The optical disk as claimed in claim 40,  
wherein the second information area is arranged over  
a partial area within the first information area, and over  
15 another area located on the inner peripheral side of the first  
information area.
45. The optical disk as claimed in claim 40,  
wherein the first disk information is recorded in  
a form of minute concavo-convex pits.
- 20 46. An optical disk of recording type on which data  
is recordable,  
wherein said optical disk has a sector structure  
comprising a plurality of sectors,  
wherein each of the sectors includes a sector header  
25 area and a main data area for recording encrypted data therein,

wherein the sector header area includes a decipher key information area for recording therein at least one decipher key required for decrypting the encrypted data, and

5 wherein a size of the decipher key information area is smaller than that of each decipher key.

47. The optical disk as claimed in claim 46,  
wherein each decipher key is divided into a plurality  
of divided decipher keys having a predetermined size, and  
wherein said plurality of divided decipher keys are  
10 recorded in respective decipher key information areas of a  
plurality of continuous sectors.

48. The optical disk as claimed in claim 47,  
wherein the number of the divided decipher keys is  
a measure of the number of the sectors which are included in  
15 error correction code (ECC) blocks, and which are a plurality  
of sectors required for error correction.

49. The optical disk as claimed in claim 46,  
wherein said respective decipher keys are recorded  
in a decipher key table having a plurality of decipher keys,  
20 and

wherein indexes for indicating recorded positions  
of the decipher keys required for decrypting the encrypted data  
within the decipher key table are recorded in the decipher key  
information areas of the sectors.

25 50. The optical disk as claimed in claim 49,

wherein decipher key status areas for recording decipher key statuses on the respective decipher key areas of the decipher key table are recorded as information for representing a recorded status of the decipher key table.

5        51. The optical disk as claimed in claim 49,  
          wherein the decipher key table is recorded over a plurality of different error correction code (ECC) blocks.

10      52. The optical disk as claimed in claim 49,  
          wherein the respective decipher keys are managed and recorded in at least one unit of a file unit managed in a file management area, and an extent unit comprising a plurality of continuous sectors on the optical disk.

15      53. An optical disk of recording type on which data is recordable,

          wherein said optical disk includes a main data area for recording data therein,

          wherein said main data area includes a non-encrypted area for recording data in a non-encrypted status, and an encrypted area for recording data in an encrypted status,

20      wherein said non-encrypted area includes decipher key conversion data used for conversion of a decipher key for decrypting data, and

          wherein data in the encrypted area is encrypted using the decipher key which is converted using the decipher key conversion data.

54. The optical disk as claimed in claim 53,  
wherein said main data area includes a control  
information recording sector for recording control information  
used for controlling data reproduction in a non-encrypted  
status, and a data recording sector for recording data in an  
encrypted status,

wherein said control information recording sector  
includes decipher key conversion data used for conversion of  
the decipher key, and

10 wherein data in the data recording sector is  
encrypted using the decipher key which is converted using the  
decipher key conversion data.

55. The optical disk as claimed in claim 54,  
wherein said data recording sector includes a  
15 non-encrypted area for recording data in a non-encrypted status,  
and an encrypted area for recording data in an encrypted status,  
wherein said non-encrypted area is further decipher  
key conversion data, and

20 wherein AV data in the encrypted area is encrypted  
using a decipher key obtained by further converting a decipher  
key, which is converted using the decipher key conversion data,  
using a further second decipher key.

56. The optical disk as claimed in claim 53,  
wherein said decipher key conversion data includes  
25 at least copying control information of data.

57. An optical disk recording method for recording data on an optical disk of recording type on which data is recordable, including the steps of:

reading out a decipher key status which is recorded  
5 on the optical disk, and judging whether or not there is an empty area for a decipher key based on the read-out decipher key status;

reserving a decipher key area and recording the decipher key in the decipher key area, when judging that there  
10 is the empty area for the decipher key;

setting copyright control information and a decipher key index in at least one unit of a file unit and an extent unit;

encrypting data using the decipher key, and recording the encrypted data on the optical disk in at least one unit of  
15 a file unit and an extent unit; and

recording on said optical disk, optical disk file management information for managing data which is recorded on said optical disk.

58. An optical disk reproducing method for  
20 reproducing data from an optical disk of recording type on which data is recordable, including the steps of:

reproducing and acquiring a decipher key index from a data recording area in which data to be reproduced is recorded in a file unit or an extent unit;

25           reproducing and acquiring a decipher key

corresponding to the acquired decipher key index; and  
reproducing data in the file unit or the extent unit  
which is encrypted using the decipher key.

59. An optical disk deleting method for deleting  
5 data from an optical disk of recording type on which data is  
recordable, comprising:

reproducing and acquiring a decipher key index from  
a recording area in which data to be deleted is recorded in a  
file unit or an extent unit;

10 updating a decipher key status, which corresponds  
to the acquired decipher key index and which indicates a recorded  
status of a decipher key, and releasing the decipher key; and

15 updating file management information for managing  
data which is recorded on the optical disk, by deleting a file  
entry corresponding to the data to be deleted from the file  
management information.

60. An information processing system comprising:  
a data encrypting apparatus for encrypting data using  
a cipher key;

20 an optical disk recording and reproducing apparatus  
for recording a decipher key required for decrypting data on  
an optical disk of recording type, and reproducing the recorded  
decipher key; and

25 a control apparatus connected to said optical disk  
recording and reproducing apparatus and the data encrypting

apparatus,

wherein said optical disk recording and reproducing apparatus comprises:

first recording and reproducing means for recording  
5 a decipher key table on the optical disk, and reproducing the decipher key table from the optical disk;

encrypting and decrypting means for encrypting the decipher key, transmitting the encrypted decipher key, receiving the encrypted decipher key from the control apparatus,  
10 and decrypting the encrypted decipher key; and

second recording and reproducing means for recording a decipher key status table for indicating a recorded status of the decipher key on the optical disk, and reproducing the decipher key status table from the optical disk;

15 wherein said data encrypting apparatus comprises:

encrypting means for encrypting the decipher key, and transmitting the encrypting decipher key to said control apparatus; and

wherein said control apparatus comprises:

20 receiving means for receiving the encrypted decipher key from said encrypting means of said data encrypting apparatus; and

allocating means for searching for an empty area for the decipher key based on the reproduced decipher key status  
25 table, allocating the received and encrypted decipher key into

the searched empty area, and transmitting the allocated and encrypted decipher key to the optical disk recording and reproducing apparatus, and

wherein said encrypting and decrypting means of said  
5 optical disk recording and reproducing apparatus receives the allocated and encrypted decipher key from said allocating means of the control apparatus, and decrypts the received encrypted decipher key.

61. An information processing system comprising:  
10 an optical disk reproducing apparatus for reproducing a decipher key table comprising data and a plurality of decipher keys required for decrypting the data from an optical disk of recording type;  
15 a control apparatus connected to said optical disk reproducing apparatus; and  
a data decrypting apparatus for decrypting data using the decipher keys,

wherein said optical disk reproducing apparatus comprises:

20 first reproducing means for reproducing the decipher key table from the optical disk;  
encrypting means for encrypting the reproduced decipher key table, and transmitting the encrypted decipher key table to said control apparatus; and  
25 second reproducing means for reproducing a decipher

key status table for indicating recorded statuses of the plurality of decipher keys from said optical disk;

wherein said control apparatus comprises:

receiving means for receiving the encrypted decipher

5 key table from said optical disk reproducing apparatus; and

searching means for searching for the encrypted decipher key required for decrypting data which is recorded on the optical disk from the received decipher key table, based on the reproduced decipher key status table, and transmitting

10 the searched encrypted decipher key to the data decrypting means; and

wherein said data decrypting apparatus comprises:

first decrypting means for decrypting the encrypted decipher key, and producing the decipher key, and

15 second decrypting means for decrypting the encrypted data, which is reproduced by said optical disk reproducing apparatus, using the decrypted decipher keys.

62. An optical disk recording apparatus for recording data on an optical disk of recording type on which  
20 data is recordable,

wherein said optical disk includes a non-encrypted area and an encrypted area, and

wherein said optical disk recording apparatus comprises:

25 recording means for recording data, including

decipher key conversion data used for conversion of a decipher key for decrypting data, in the non-encrypted area in a non-encrypted status, and recording encrypted data in the encrypted area using the decipher key which is converted using  
5 the decipher key conversion data.

63. The optical disk recording apparatus as claimed in claim 62,

wherein said optical disk includes a control information recording sector and a data recording sector, and  
10 wherein said recording means records in a non-encrypted status control information used for controlling reproduction of the data in the control information recording sector, converts a cipher key into a converted decipher key using the decipher key conversion data, encrypts data using the  
15 converted decipher key, and records the encrypted data in the data recording sector.

64. The optical disk recording apparatus as claimed in claim 63,

wherein said recording means records in a non-  
20 encrypted status data including further decipher key conversion data on the non-encrypted area of the data recording sector, converts the cipher key into a converted decipher key, using the decipher key conversion data included in the control information and the further decipher key conversion data,  
25 encrypts data using the converted decipher key, and records the

encrypted data in the data recording sector.

65. An optical disk reproducing apparatus for reproducing data from an optical disk of recording type on which data is recordable,

5 wherein said optical disk includes a non-encrypted area and an encrypted area, and

wherein said optical disk reproducing apparatus comprises:

reproducing means for converting a decipher key into  
10 a converted decipher key, using decipher key conversion data which is recorded in the non-encrypted area, decrypting data which is recorded in the encrypted area using the converted decipher key, and reproducing the decrypted data.

66. The optical disk reproducing apparatus as  
15 claimed in claim 65,

wherein said optical disk includes a control information recording sector and a data recording sector, and

wherein said reproducing means reproduces control information used for controlling data reproduction from the  
20 control information recording sector, converts a decipher key into a converted decipher key using decipher key conversion data included in the control information, decrypts data which is recorded in the data recording sector using the converted decipher key, and reproduces the decrypted data.

25 67. The optical disk reproducing apparatus as

claimed in claim 66,

wherein said reproducing means reproduces further decipher key conversion data which is recorded in the non-encrypted area of the data recording sector, converts the 5 decipher key into a converted decipher key, using decipher key conversion data included in the control information and the reproduced further decipher key conversion data, decrypts data which is recorded in the data recording sector using the converted decipher key, and reproduces the decrypted data.

10 68. An optical disk recording method for recording data in an optical disk of recording type on which data is recordable,

wherein said optical disk includes a non-encrypted area and an encrypted area, and

15 wherein said method includes the steps of:  
recording in a non-encrypted status data including decipher key conversion data used for conversion of a decipher key for decrypting data in the non-encrypted area, and recording encrypted data in the encrypted area using the decipher key which 20 is converted using the decipher key conversion data.

69. An optical disk reproducing method for reproducing data from an optical disk in which data is recordable,

wherein said optical disk includes a non-encrypted 25 area and an encrypted area, and

wherein said method includes the steps of:  
converting a decipher key into a converted decipher  
key using decipher key conversion data which is recorded in the  
non-encrypted area, decrypting data which is recorded on the  
5 encrypted area using the converted decipher key, and reproduces  
the decrypted data.

70. An optical disk of read-only type for  
reproducing recorded data, including:

a data reproducing area for recording data therein;  
10 and

a read-only disk identification information area for  
recording therein disk identification information for  
identifying said optical disk,

wherein said data reproducing area includes an area  
15 in which data is recorded which is encrypted using information  
including the disk identification information for identifying  
the optical disk as a key.

71. An optical disk of read-only type for  
reproducing recorded data,

20 wherein said optical disk includes a data reproducing  
area for recording data therein, and

wherein said data reproducing area includes content  
data which is at least one of encrypted image data and encrypted  
music data, and a descramble key for decrypting a cipher which  
25 has been performed on the content data.

72. An optical disk of read-only type for reproducing recorded data, including:

a read-only disk identification information area for recording therein disk identification information for

5 identifying the optical disk;

a data reproducing area for recording therein content data including at least one of encrypted image data and encrypted music data; and

10 a key management information area for recording therein key information used when reproducing the content data, and a scramble key which is encrypted using the disk identification information as a key.

73. An optical disk of read-only type for reproducing recorded data,

15 wherein said optical disk has a sector structure including a plurality of sectors,

wherein each of the sectors includes a sector header area, and a main data area for recording encrypted data therein,

20 wherein said sector header area includes a decipher key information area for recording therein at least one decipher key required for decrypting the encrypted data, and

wherein a size of the decipher key information area is smaller than that of each decipher key.

Add  
A